

REV 0 8 2004

AMENDMENT(S) TO THE SPECIFICATION

Please replace the paragraph beginning at page 3, line 9, with the following rewritten paragraph:

The IFFT modulator 14 performs a $2N$ -point inverse fast fourier transform on the conjugate complex signal $X(k)$ to obtain the sampled real signal $x(n)$. Since $X(k)$ is a symmetric signal, the output of the IFFT modulator ~~16~~ 14 is a real signal $x(n)$. The real signal $x(n)$ may be thought of as the summation of a plurality of cosine functions each having a finite length and a different frequency, phase, and amplitude, where these frequencies are multiples of a fundamental frequency. Since each of the cosine functions has a finite duration, $x(n)$ is a varying amplitude discrete signal having a finite duration spanning $2N$ samples. Each cosine function is known as a bin or tone.

Please replace the paragraph beginning at page 21, line 4, with the following rewritten paragraph:

Figure 2 shows the DMT demodulator employing frequency domain windowing. The CP remover 34 output is provided to a first data path 100' (DP1) which includes the FFT 120' and an FEQ 140'. The output of the FFT 120' is provided to a second data path 200' (DP2) where frequency domain windowing is performed. The output of the frequency domain window 220' is provided to the DFE 260'. The output of the DFE 260' is provided to the bin select logic 300'. The output of FEQ 140' from the first data path ~~[[10']]~~ 100' is also provided to the bin select logic. The output of the bin select logic 300' is provided to slicer circuit 400' which provides the output of the demodulator. A feedback path 410' is provided from the output of the slicer circuit 400' to the DFE 260'. FEQ 140' provides coefficients for DFE 260' via path 142'.